



**Australian Government**

**Department of Education, Employment and Workplace Relations**

# **SISOSCB302A Complete night dives**

**Release: 2**

## **SISOSCB302A Complete night dives**

### **Modification History**

Not Applicable

### **Unit Descriptor**

This unit describes the performance outcomes, skills and knowledge required to plan and perform a dive at night in open water to a maximum depth of 18 metres. This unit also focuses on night navigation and hazard negotiation.

### **Application of the Unit**

This unit applies to current or aspiring SCUBA dive guides or instructors working in a range of open water conditions that include night dives to a maximum depth of 18 metres. This may include those working for private dive schools or companies operating at coastal sites or through holiday resorts.

### **Licensing/Regulatory Information**

No licensing, regulatory or certification requirements apply to this unit at the time of endorsement.

### **Pre-Requisites**

SISOSCB301A SCUBA dive in open water to a maximum depth of 18 metres

### **Employability Skills Information**

This unit contains employability skills.

## Elements and Performance Criteria Pre-Content

### Elements and Performance Criteria

#### ELEMENT

#### PERFORMANCE CRITERIA

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the Evidence Guide.

- |   |  |
|---|--|
| 1. Plan a night dive.                   | <p>1.1. Determine <b><i>factors affecting site selection</i></b> and ensure selected night dive site meets <b><i>industry technical and safety criteria, relevant legislation and organisational policies and procedures</i></b>.</p> <p>1.2. Access information on the dive site and identify potential <b><i>night hazards</i></b> and <b><i>physics and physiology</i></b> associated with the night dive and implement procedures to minimise <b><i>risks</i></b>.</p> <p>1.3. Access <b><i>relevant sources</i></b> to interpret detailed <b><i>weather and environmental information</i></b> to determine night dive <b><i>plan</i></b>.</p> <p>1.4. Establish a <b><i>communication system</i></b> to use with buddy and other participants while night diving.</p> |
| 2. Select and use night dive equipment. | <p>2.1. Select <b><i>dive equipment</i></b> and <b><i>lighting equipment</i></b> according to <b><i>diver's needs and characteristics</i></b> and industry technical and safety criteria.</p> <p>2.2. Assess equipment for safety and suitability and adjust and fit to ensure personal comfort.</p> <p>2.3. Use and maintain equipment according to industry technical and safety criteria, relevant legislation and organisational policies and procedures.</p> <p>2.4. Calculate no-decompression times according to industry technical and safety criteria.</p>  |
| 3. Perform night dives.                 | <p>3.1. Perform <b><i>entries to and exits from the water</i></b> maintaining orientation and buddy contact, according to industry technical and safety criteria.</p> <p>3.2. Complete ascents and descents with reference without losing orientation or buddy contact.</p> <p>3.3. Use hand signals and dive lights to achieve communication with buddy and other participants.</p> <p>3.4. Negotiate hazards safely while maintaining buddy contact throughout the night dive.</p>   |

**ELEMENT****PERFORMANCE CRITERIA**

- |                                    |  |
|------------------------------------|--|
|                                    | 3.5. Navigate the route by compass and or natural phenomena.                               |
|                                    | 3.6. Ensure personal dive lights illuminate dive site and identify nocturnal aquatic life. |
|                                    | 3.7. Demonstrate light failure drill according to industry technical and safety criteria.  |
| 4. Evaluate night diving activity. | 4.1. Evaluate <i>relevant aspects</i> of the night diving activity.                        |
|                                    | 4.2. Identify improvements for future night dives.   |

## Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

### Required skills

- communication skills to inform progress and interact with buddy throughout night diving via physical contact and underwater hand and light signals
- teamwork skills to:
  - check, assemble and fit buddy's dive equipment
  - negotiate maximum time and depth limits
  - take extra precautions during night diving to ensure safety of buddy
- swimming and navigating skills to safely dive at night
- problem-solving skills to:
  - determine time, depth and air supply limits
  - adapt to changing weather and sea conditions
  - navigate underwater at night
  - use a dive light to check for other divers and hazards
- self and buddy rescue, first aid and emergency response skills appropriate to the site to enable initial response to emergencies and personal health care.

### Required knowledge

- legislation, organisational policies and procedures and industry technical and safety criteria to enable safe conduct of all night diving activities
- minimal impact interactions and techniques to minimise negative impact on nocturnal aquatic animal and plant life
- selection, use and maintenance of SCUBA equipment suitable for night diving, characteristics and technology, the advantages and disadvantages of the range of equipment, such as lighting options
- physics and physiology, such as the direct and indirect effects of pressure and signs, symptoms, prevention and treatment of common SCUBA diving risks such as decompression illness to enable safe performance
- weather and environmental information to interpret forecast conditions and their effect on the diving activity
- sea features such as currents, waves and tides and how these might impact on the night dive
- factors affecting buoyancy and how to control sinking and floating
- no-decompression dive tables to determine air requirements
- underwater communication systems used at night such as hand and torch signals to communicate with and ensure safety of buddy
- night navigation techniques to avoid getting lost under water
- hazards and risks commonly associated with open water night diving to a depth of 18 metres
- emergency, first aid and rescue procedures appropriate to the location to ensure risk minimisation to self and group.



## Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

### Overview of assessment

#### Critical aspects for assessment and evidence required to demonstrate competency in this unit

Evidence of the following is essential:

- applies relevant process to select, maintain and fit dive and lighting equipment and calculates maximum dive time and depth using a no-decompression table
- practices night navigation techniques while maintaining contact and communication with buddy at all times
- negotiates hazards and risks and minimises negative impact on nocturnal aquatic animal and plant life throughout night dive according to industry technical and safety criteria, relevant legislation and organisational policies and procedures
- evaluates and reflects on own night diving performance to identify strengths, weaknesses and areas that need improvement.

#### Context of and specific resources for assessment

Assessment must ensure participation in multiple night diving activities to demonstrate competency and consistency of performance.

Assessment must also ensure access to:

- resources and information to plan and select appropriate equipment for the SCUBA diving activity
- a suitable open water dive site for night diving
- a buddy to participate in night dive process
- a suitable diving boat, if required
- SCUBA, night, navigation, communication and safety equipment.

#### Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- observation of the planning and review process
- oral or written questioning to assess knowledge of open water night diving techniques, hazards and risks
- observation of safe participation and communication with buddy throughout night dives
- written and or verbal self evaluation
- third-party reports from a supervisor detailing

performance.

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.



## Range Statement

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

***Factors affecting site selection*** may include:

- entry and exit points
- bottom conditions
- aquatic life
- environmental conditions
- visibility.

***Industry technical and safety criteria*** may include:

- British Sub-Aqua Club (BSAC)
- Professional Association of Diving Instructors (PADI)
- SCUBA Schools International (SSI).

***Relevant legislation*** may include:

- occupational health and safety
- permits or permission for access
- environmental regulations
- marine regulations.

***Organisational policies and procedures*** may include:

- occupational health and safety
- communication protocols
- code of ethics
- manufacturer's recommendations.

***Night hazards*** may include:

- lack of light
- poor weather
- light failure
- buddy separation
- disorientation
- squeezes
- barotrauma
- panic
- aquatic animals and plants.

***Physics and physiology*** may include

- pressure or volume or density relationships
- temperature
- buoyancy
- respiration
- air consumption
- ingassing and offgassing
- decompression sickness
- nitrogen narcosis

- Risks*** may include:
- oxygen toxicity
  - carbon monoxide toxicity
  - hypothermia.
  - hypothermia
  - heat exhaustion
  - injuries
  - exhaustion
  - lost part or party member
  - equipment failure
  - other diver's shining flash light in eyes
  - near drowning
  - getting lost or separated from group
  - barotrauma
  - nitrogen narcosis
  - contaminated SCUBA air
  - cramps
  - stings or bites
  - Decompression Illness (DCI).
- Relevant sources*** may include:
- Bureau of Meteorology
  - media
  - land managers or agencies
  - coastal patrol or coastguard
  - volunteer marine rescue
  - local knowledge.
- Weather and environmental information*** may include:
- satellite images
  - daily and weekly forecasts
  - maximum and minimum temperatures
  - weather warnings
  - event warnings
  - river levels
  - synoptic charts
  - high and low tide predictions.
- Plan*** may include:
- objectives
  - date, time and duration of night dive
  - site and equipment
  - suitable buddy
  - time, depth and air supply limits
  - safety and emergency procedures.
- Communication system*** may include:
- calls
  - radio
  - hand signals

- Dive equipment*** may include:
- whistles.
  - fins
  - mask
  - snorkel
  - wetsuit or drysuits
  - buoyancy control device (BCD) with low pressure inflator
  - compressed air cylinder and valve
  - regulator and backpack
  - alternate air source
  - submersible pressure gauge
  - torch or flashlight and backup
  - strobe light
  - timing device
  - depth gauge
  - no-decompression tables
  - computer
  - weight belt and weights
  - diver's tool
  - communication equipment
  - navigation equipment.
- Lighting equipment*** may include:
- primary
  - back-up
  - chemical.
- Diver's needs and characteristics*** may include:
- age
  - cultural and situational factors
  - previous experience and knowledge
  - physical development
  - diver's build, weight and lung capacity.
- Entries to and exits from water*** may include:
- off-shore
  - off dive boats
  - exit points lit up or contain a buoy.
- Relevant aspects*** may include:
- objectives
  - planning process
  - activity site
  - weather
  - equipment selection
  - clothing selection
  - food selection
  - instructional content
  - instructional technique
  - assessment technique

- group feedback
- directing techniques
- rescue techniques employed.

## **Unit Sector(s)**

Outdoor Recreation

## **Competency Field**

SCUBA